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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,923	06/22/2001	Harold Kutz	CYPR-CD00229	7463

7590 05/25/2004

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EXAMINER

PERVEEN, REHANA

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 05/25/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/887,923

Applicant(s)

KUTZ ET AL.

Examiner

Rehana Perveen

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/27/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ezell, Patent No. 6,141,764, in view of Wittman, Patent No. 5,850,156.

As to claim 14, Ezell teaches a system (system 100, figure 1) in a microcontroller comprising a power supply (110, figure 1), a bus, a processor (112, figure 1) coupled to the bus (figure 1), a power-on-reset circuit (116, figure 1), the processor and the power-on-reset circuit coupled to the bus and interconnectedly coupled via the bus (figure 1), the power supply interconnectedly coupled with the power-on-reset circuit and responsive to signals therefrom (figure 1), the system executing a method comprising the steps of supplying a power state to the microcontroller from the power supply (col. 2 line 58 – col. 3 line 20), sensing a power state condition of the power state (col. 3 lines 5-20), controlling certain functions of the microcontroller accordingly (minimize power consumption by changing between powered-down state and active state, col. 4 lines 3-9), and dynamically programming the power-on-reset circuit via the bus (col. 3 line 5 – col. 4 line 9).

However, Ezell does not expressly teach determining a suitability status of the power state condition, communicating the suitability status between the power-on-reset circuit and the processor, and controlling the certain functions of the microcontroller based on the suitability status.

Wittman teaches determining a suitability status of a power state condition, communicating the suitability status between a power-on-reset circuit and a processor, and controlling the certain functions of a microcontroller based on the suitability status (col. 1 line 5 – col. 2 line 63).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine teachings of Ezell and Wittman because both are commonly directed to the power-on-reset circuit environment, and Wittman's controlling certain functions of the microcontroller in response to power state suitability status, when incorporated into Ezell, would have enabled improved integrity of the system by avoiding premature activation of a processor couplable to a power-on-reset circuit.

As to claim 15, Ezell teaches the sensing step is accomplished by the power-on-reset circuit (col. 3 line 64 – col. 4 line 9). Wittman teaches the determining of suitability status step is accomplished by the power-on-reset circuit (figure 2 and col. 2 lines 1-6).

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As to claim 16, Wittman teaches sensing a common supply voltage, which is the voltage of the power state (col. 1 line 30 – col. 2 line 6).

As to claim 17, Wittman teaches generating a precision reference voltage independent of the common supply voltage, dividing the common supply voltage into a plurality of aspect voltages, each corresponding to a separate voltage quantity being an independent multiple of the common supply voltage, forming a plurality of comparisons, each comparison comparing one of the plurality of aspect voltages to the precision reference voltage, and generating a plurality of power state condition signals, each of the signal corresponding to one of the plurality of comparisons (abstract and col. 4 line 21 - col. 5 line 18).

As to claim 18, Wittman teaches a power supply scaler comprising a divider of the common supply voltage, a matrix of multiplexers and registers, and an interconnection to the bus (col. 4 lines 4-67).

As to claim 19, Wittman teaches ascertaining a status of the microcontroller, determining an optimal power state corresponding to the status, programmatically calculating an optimal value for each programmable independent multiple of the common supply voltage, setting each the optimal value, and repeating the steps (col. 4 line 36 – col. 5 line 19).

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As to claim 20, Wittman teaches communicating each of the optimal value to the power supply scaler via the bus, registering each of the optimal value with the matrix of multiplexers and registers, commanding the matrix of multiplexers and registers to change the independent multiple of the common supply voltage to correspond with the optimal value, and monitoring the matrix of multiplexers and registers (col. 5 line 20 – col. 6 line 25).

Claims 1-13 and 21 are directed to the method of system claims 14-20. Ezell and Wittman, in combination, teach the system as set forth in claims 14-20. Therefore, Ezell and Wittman, in combination, also teach the method as set forth in claims 1-13 and 21.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rehana Perveen whose telephone number is 703-305-8476. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on 703-308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

Rehana Perveen
Primary Patent Examiner
Technology Center 2100